ABSTRACT

Disclosed herein is a method and apparatus for encrypting and compressing multimedia data, which transforms and compresses multimedia data through an encryption key in a process of compressing the multimedia data to record and transmit the data, and encrypts the multimedia data to allow the data to be decoded using only the encryption key. The method includes creating Discrete Cosine Transform (DCT) coefficients by applying input multimedia data to a DCT unit, and quantizing the DCT coefficients; encrypting and compressing transformed Differential Coefficients (DC coefficient) and transformed Amplitude Coefficients (AC coefficient) by transforming encoded DC and AC coefficients depending on a certain encryption key at the time of entropy encoding quantized DC and AC coefficients of the quantized DCT coefficients; and Huffmann coding the encrypted DC and AC coefficients and outputting the coded DC and AC coefficients. The method is a data compression method suitable for processing multimedia data for wireless communication.